

# Mineral Industry Surveys

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## SILVER IN APRIL 2005

U.S. mines produced 117,000 kilograms (kg) of silver in April, a 8% decrease compared with that of March, according to the U.S. Geological Survey. Production of silver in Nevada was down by 17% over the same period. Domestic silver production increased by 23% and Nevada's silver production decreased by 5% compared with April 2004 production.

Engelhard Industries' average silver price for April was \$7.14 per troy ounce, 2% less than the average March price, and slightly more than the average April 2004 price.

On April 25, the United States Mint began selling the 2005 Chief Justice John Marshall Silver Dollar coins, which were minted in commemoration of the 250th anniversary of the year of Marshall's birth. The Mint was authorized to mint 400,000 coins (United States Mint, 2005).

In response to a lawsuit filed by the Rock Creek Alliance and Earth Justice seeking to halt the permitting of the Rock Creek silver-copper project in northwest Montana, the United States District Court in Missoula, MT, remanded the Biological Opinion of the U.S. Fish and Wildlife Service back to the agency for further review and consideration. The Alliance claimed that the mine would destroy water quality and drive the grizzly bear and bull trout into extinction. The project, owned by Revett Minerals Inc. (Spokane, WA), was estimated to have the potential to produce 26,800 metric tons per year (t/yr) of copper and 218,000 kilograms per year (kg/yr) of silver (Northern Miner, 2005b). Revett Silver, a subsidiary of Revett Minerals Inc., was also redeveloping the Troy Mine in Lincoln County, MT. During the first quarter of the year, the mine had its first commercial production of copper and silver in concentrates since 1993. The mine was projected to produce 87,000 kg of silver and 10,400 metric tons of copper in 2005. Once fully operational, the mine was projected to produce 100,000 kg/yr of silver and 12,000 t/yr of copper (Platts Metals Week, 2005b).

Coeur d'Alene Mines Corporation (Coeur d'Alene, ID) announced that it had acquired all of the silver production and

reserves contained at the Endeavor Mine in Australia, which is operated by CBH Resources Ltd. (Sydney, New South Wales, Australia). The mine, located 720 kilometers northwest of Sydney, was expected to produce 40,400 kg/yr of silver from reserves estimated to contain 746,000 kg of silver (Coeur d'Alene Mines Corporation, 2005).

In southwestern Bolivia, Apex Silver Mines Limited (Denver, CO) predicted the San Cristobal Mine would start production in late 2007. The San Cristobal Mine was estimated to be one of the largest silver-zinc open pit mines in the world, with silver reserves of 14,200,000 kg (Northern Miner, 2005a).

Barrick Gold defended its plan to move several thousand metric tons of glacial ice in the Andes Mountains as part of its new Pascua Lama gold mine. Eight million cubic meters of ice from three glaciers, which lie on top of the deposit on the Chile-Argentina border, would be moved to a nearby glacier, and according to Barrick the local water supply would not be affected. The project was estimated to cost about \$1.4 billion and was expected to produce 23,000 kg/yr of gold and 933,000 kg/yr of silver. The project, with reserves of 547,000 kg of gold and 20,000,000 kg of silver, was expected to start production in 2009 (Platts Metals Week, 2005a).

## References Cited

- Coeur d'Alene Mines Corporation, 2005, Coeur acquires silver production and reserves at Endeavor Mine in Australia from CBH Resources, Ltd.: Coeur d'Alene, ID, Coeur d'Alene Mines Corporation press release, April 7, 3 p.
- Northern Miner, 2005a, Apex Silver develops giant at San Cristobal: Northern Miner, v. 91, no. 7, April 8-14, p. 1, 16.
- Northern Miner, 2005b, Rock Creek hits snags: Northern Miner, v. 91, no. 10, April 29-May 5, p. 5.
- Platts Metals Week, 2005a, Barrick defends plan to move glacier to access gold deposit: Platts Metals Week, v. 76, no. 17, April 25, p. 6-7.
- Platts Metals Week, 2005b, Montana court delays major silver mine development: Platts Metals Week, v. 76, no. 15, April 11, p. 12-13.
- United States Mint, 2005, John Marshall commemorative silver dollar available April 25: Washington, DC, United States Mint press release, April 13, 2 p.

TABLE 1  
MINE PRODUCTION OF RECOVERABLE SILVER  
IN THE UNITED STATES, BY STATE<sup>1</sup>

(Kilograms)

	Nevada	Other States <sup>2</sup>	Total
2004: <sup>P</sup>			
April	23,200	72,000	95,300
May	25,700	73,300	99,000
June	26,200	79,700 <sup>r</sup>	106,000 <sup>r</sup>
July	22,900	84,400	107,000
August	24,000	82,100	106,000
September	27,200	82,800	110,000
October	25,100	79,000	104,000
November	22,200	77,900	100,000
December	34,100	82,500	117,000
January-December	302,000	944,000 <sup>r</sup>	1,250,000
2005:			
January	16,000	100,000 <sup>r</sup>	116,000 <sup>r</sup>
February	21,500	92,900 <sup>r</sup>	114,000 <sup>r</sup>
March	26,400	101,000 <sup>r</sup>	127,000 <sup>r</sup>
April	22,000	95,300	117,000
January-April	85,900	389,000	475,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, Utah, and Washington.

TABLE 2  
SILVER PRICES

(Dollars per troy ounce)

Engelhard Industries:	
2004:	
Low/date	5.60 May 13
High/date	8.23 Apr. 7
Average	6.69
2005:	
February:	
Low/date	6.54/8
High/date	7.50/22
Average	7.05
March:	
Low/date	6.85/28
High/date	7.54/11
Average	7.27
April:	
Low/date	6.93/29
High/date	7.33/21
Average	7.14
Year to date:	
Low/date	6.42 Jan. 4
High/date	7.54 Mar. 11
Average	7.03
Handy and Harman:	
2004, Average	6.69
2005:	
February	7.07
March	7.29
April	7.16
Year to date	7.05
London Final: <sup>1</sup>	
2004, Average	6.65
2005:	
February	7.03
March	7.26
April	7.12
Year to date	7.01

<sup>1</sup>Reported as "London Spot/US Equiv."

Source: Platts Metals Week.

TABLE 3  
U.S. IMPORTS OF SILVER, BY COUNTRY<sup>1</sup>

Period and country	Bullion		Doré		Ores and concentrates <sup>2</sup>		Ash and residues		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2004	3,410,000	\$728,000	346,000	\$117,000	2,220	\$1,410	6,710	\$1,530	3,760,000	\$848,000
2005:										
January	351,000	75,600	24,200	6,660	--	--	69	30	375,000	82,300
February	320,000	71,400	21,600	6,420	--	--	96	40	341,000	77,800
March:										
Australia	3,000	614	--	--	--	--	--	--	3,000	614
Canada	137,000	32,700	--	--	--	--	--	--	137,000	32,700
Chile	4,000	909	--	--	--	--	--	--	4,000	909
Colombia	--	--	574	151	--	--	--	--	574	151
Honduras	--	--	32	7	--	--	--	--	32	7
Mexico	140,000	32,500	11,900	3,490	--	--	--	--	151,000	36,000
Panama	2 <sup>3</sup>	8	--	--	--	--	--	--	2	8
Peru	55,800	12,500	11,000	2,820	--	--	--	--	66,800	15,300
Taiwan	--	--	--	--	--	--	162	56	162	56
Total	340,000	79,300	23,500	6,470	--	--	162	56	363,000	85,800
Year to date	1,010,000	226,000	69,200	19,600	--	--	327	126	1,080,000	246,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes silver content of base metal ores and concentrates.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS OF SILVER, BY COUNTRY<sup>1</sup>

Period and country	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms <sup>2</sup> (gross weight)		Waste and scrap (gross weight)	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2004	342,000	\$69,600	27,400	\$6,920	289	\$66	52,300	\$11,900	2,020,000	\$162,000
2005:										
January	10,300	2,450	3,560	878	--	--	2,760	667	284,000	11,700
February	18,900	4,450	312	55	--	--	1,340	320	389,000	9,090
March:										
Brazil	--	--	--	--	--	--	2,190	578	24	163
Canada	11,700 <sup>3</sup>	2,870	--	--	--	--	393	67	17,600	2,080
China	--	--	--	--	--	--	--	--	1,460	90
Colombia	--	--	--	--	--	--	--	--	1	18
Costa Rica	--	--	--	--	--	--	--	--	23,800	660
Dominican Republic	--	--	--	--	--	--	--	--	89	152
El Salvador	--	--	--	--	--	--	--	--	11	140
France	--	--	--	--	--	--	--	--	144,000	425
Germany	78	16	580	111	--	--	--	--	556	1,050
Greece	--	--	--	--	--	--	--	--	2	38
Guatemala	--	--	--	--	--	--	--	--	18	151
Honduras	--	--	--	--	--	--	--	--	18	204
India	105	22	--	--	--	--	--	--	--	--
Ireland	--	--	--	--	--	--	--	--	27	133
Italy	6 <sup>3</sup>	13	--	--	--	--	--	--	65	1,210
Japan	--	--	2,000 <sup>3</sup>	573	--	--	--	--	6	113
Korea, Republic of	--	--	--	--	--	--	--	--	7	122
Malaysia	--	--	150	26	--	--	--	--	30	88
Mexico	35,500	8,050	--	--	--	--	--	--	159,000	2,460
Panama	--	--	--	--	--	--	--	--	37	257
Singapore	--	--	(4) <sup>3</sup>	6	--	--	--	--	6	116
Spain	--	--	--	--	--	--	278	72	--	--
Taiwan	--	--	--	--	--	--	--	--	1,010	461
United Kingdom	--	--	--	--	--	--	--	--	54,200	583
Total	47,400	11,000	2,730	716	--	--	2,860	717	402,000	10,700
Year to date	76,600	17,900	6,600	1,650	--	--	6,960	1,710	1,070,000	31,500

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Containing 99.5% or more by weight of silver.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

<sup>4</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF SILVER<sup>1</sup>

Period and country	Bullion		Doré		Ores and concentrates <sup>2</sup>		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2004	302,000	\$64,500	79,800	\$18,800	1,560	\$307	384,000	\$83,600
2005:								
January	11,200	2,370	7,280	1,590	589	120	19,000	4,080
February	16,100	4,550	41,200	13,100	112	29	57,400	17,700
March:								
Armenia	--	--	--	--	61	13	61	13
Canada	14,500 <sup>3</sup>	4,710	--	--	--	--	14,500	4,710
Finland	--	--	--	--	17	3	17	3
Germany	87 <sup>3</sup>	10	--	--	--	--	87	10
Hong Kong	98	18	--	--	--	--	98	18
Mexico	28 <sup>3</sup>	4	--	--	--	--	28	4
Norway	--	--	613 <sup>3</sup>	218	--	--	613	218
Switzerland	--	--	8,960	2,100	--	--	8,960	2,100
Trinidad and Tobago	--	--	--	--	28	8	28	8
Total	14,700	4,740	9,580	2,320	106	24	24,400	7,090
Year to date	42,000	11,700	58,000	17,000	807	173	101,000	28,800

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes silver content of base metal ores and concentrates.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 6  
U.S. EXPORTS OF SILVER<sup>1</sup>

Period and country	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms <sup>2</sup> (gross weight)		Waste and scrap (gross weight)	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2004	39,600	\$8,690	708,000	\$122,000	61,500	\$5,720	269,000	\$48,300	2,240,000	\$424,000
2005:										
January	1,440	345	55,900	9,600	3,570	306	14,100	2,510	212,000	34,400
February	1,100	270	58,900	10,100	5,830	546	45,000	8,080	273,000	48,200
March:										
Belgium	--	--	201 <sup>3</sup>	35	--	--	123	21	8,440	3,650
Brazil	--	--	--	--	126 <sup>3</sup>	4	--	--	6	32
Canada	2,410 <sup>3</sup>	653	1,760	303	3,030 <sup>3</sup>	164	6,790	1,180	54,400	7,530
China	--	--	577	98	--	--	44 <sup>3</sup>	11	41,500	5,030
Dominican Republic	494	109	--	--	--	--	134	23	--	--
France	--	--	5,780	982	--	--	1,690	288	--	--
Germany	--	--	6,810	1,160	40	9	872	150	29,600	6,950
Hong Kong	--	--	636	111	--	--	1,370	233	5,350	696
Israel	--	--	--	--	--	--	29 <sup>3</sup>	7	--	--
Italy	--	--	--	--	--	--	425	74	25,900	7,540
Japan	368	116	11,800	2,010	--	--	15	5	358	2,590
Korea, Republic of	--	--	27,100	4,730	--	--	47	9	1,980	257
Malaysia	--	--	--	--	--	--	221	38	--	--
Mexico	76	17	811	138	53	12	1,770	356	--	--
Netherlands	--	--	481	82	--	--	1,430	249	--	--
Netherlands Antilles	19 <sup>3</sup>	7	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	92	16	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	505	2,480
Singapore	--	--	725	123	--	--	92	16	--	--
Spain	--	--	--	--	--	--	1,120	190	846	110
Sweden	--	--	702	119	46 <sup>3</sup>	3	--	--	3,990	660
Switzerland	--	--	--	--	--	--	52	9	--	--
Taiwan	--	--	4,750	816	--	--	180 <sup>3</sup>	42	1,010	97
Thailand	--	--	--	--	--	--	--	--	1,510	266
United Arab Emirates	--	--	--	--	124	24	23	4	--	--
United Kingdom	--	--	3,240	555	--	--	1,110	191	619	834
Venezuela	--	--	80	14	--	--	--	--	--	--
Vietnam	--	--	--	--	--	--	--	--	382	50
Other	110 <sup>3</sup>	25	--	--	--	--	115 <sup>3</sup>	26	4	12
Total	3,480	925	65,400	11,300	3,420	215	17,700	3,130	176,000	38,800
Year to date	6,020	1,540	180,000	31,000	12,800	1,070	76,900	13,700	661,000	121,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Containing 99.5% or more by weight of silver.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.